

Please add new claims 44-64.

34 – 43 (Cancelled)

44. (New) An immunoassay method for detection of an antibody against HIV comprising: ✓

contacting a sample suspected of containing an antibody against HIV with at least one antigen mixture selected from the group consisting of

a first antigen mixture comprising

a first antigen derived from an epitope region II of gp 41, including amino acids 518-533 thereof, of an HIV1-subtype D isolate, and

a second antigen derived from an epitope region II of gp41 of a different HIV1 subtype of the M group, and

a second antigen mixture comprising

a third antigen derived from an epitope region I of gp 41, including amino acids 551-565, of an HIV1-subtype E isolate, and

a fourth antigen derived from an epitope region I of gp41 of a different HIV1 subtype of the M group; and

detecting a signal generated as a measure of said HIV antibody in the sample.

45. (New) The method of claim 44, wherein the first antigen includes an amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39.

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46. (Re-presented-formerly claim 36) The method of claim 44, wherein said sample comprises a member selected from the group consisting of blood, plasma, serum, urine, and saliva.

47. (Re-presented-formerly claim 37) The method of claim 44, wherein at least one antigen in the antigen mixture selected is bound to a solid phase.

48. (Re-presented-formerly claim 38) The method of claim 44, further comprising separating a solid phase from the sample prior to measuring an amount of the HIV antibody in the sample.

49. (New) The method of claim 44, wherein the third antigen is derived from an epitope region I, consisting of amino acids 551-566.

50. (New) The method of claim 44, further comprising a fifth antigen derived from epitope region I, including amino acids 570-584, or epitope region II, including amino acids 581-596, of HIV1-subtype O.

51. (New) The method of claim 44, wherein the first antigen includes a partial amino acid sequence of an amino acid sequence selected from the group consisting of SEQ ID Nos. 29, 30, 31, 32, 33, and 34 with a minimum length of 10 amino acids.

52. (New) The method of claim 51, wherein the first antigen includes a partial amino acid sequence of amino acid sequence selected from the group consisting of SEQ ID Nos. 29, 30, 31, 32, 33, and 34 with a minimum length of 7 amino acids.

53. (New) The method of claim 44, wherein the third antigen includes a partial sequence of SEQ ID No. 40 with a minimum length of 6 amino acids.

54. (New) The immunoassay of claim 44, wherein the first and the third antigens are bound to a label which generates a detectable signal when the antigens are bound to the antibody against HIV.

55. (New) An antigen mixture comprising

a first antigen derived from an epitope region II, including amino acids 518-533, of an HIV1-subtype D isolate, and

a second antigen derived from an epitope region II of gp41 of a different HIV1-subtype of the group M.

56. (New) The antigen mixture of claim 55, wherein the first antigen includes a sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38 and 39 with a minimum length of 10 amino acids.

57. (New) The antigen mixture of claim 55, further comprising a third antigen derived from epitope region I, consisting of amino acids 570-584, or epitope region II, consisting of amino acids 581-596, of HIV1-subtype O.

58. (New) An antigen mixture comprising

a first antigen derived from an epitope region I, including amino acids 551-565, of an HIV1-subtype E isolate, and

a second antigen derived from the only epitope region I of gp41 of a different HIV1-subtype of the group M.

59. (New) An antigen mixture comprising:

at least one antigen mixture selected from the group consisting of

a first antigen mixture comprising

a first antigen derived from an epitope region II of gp 41, including amino acids 518-533 thereof, of an HIV1-subtype D isolate, and

a second antigen derived from an epitope region II of gp41 of a different HIV1 subtype of the M group, and

a second antigen mixture comprising

a third antigen derived from an epitope region I of gp 41, including amino acids 551-565, of an HIV1-subtype E isolate, and

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a fourth antigen derived from an epitope region I of gp41 of a different HIV1 subtype of the M group.

60. (New) The antigen mixture of claim 59, wherein the first antigen includes an amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39.

61. (New) The antigen mixture of claim 59, wherein the first antigen includes an amino acid sequence selected from the group consisting of SEQ ID NOs. 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, and 39 with a minimum length of 7 amino acids.

62. (New) The antigen mixture of claim 59, wherein the third antigen includes SEQ ID No. 40.

63. (New) The antigen mixture of claim 59, wherein the third antigen includes SEQ ID No. 40 with a minimum length of 6 amino acids.